

National Telecommunications and Information
Administration (NTIA)
U.S Department of Commerce
1401 Constitution Ave. NW
Washington DC 20230

Oslo, 02.01.2024

Regarding the Implementation of the National Spectrum Strategy

Novelda is a pioneer and leader within UWB radar sensing delivering systems-on-chip and modules to a global market. Target applications include consumer devices, building automation, appliances, and child presence detection products. Several products are currently deployed in the market like laptops and health monitoring devices within hospital- and elderly care.

Novelda appreciates the significant pressure NTIA faces in balancing the growing demands for spectrum access from new applications while ensuring continuity for incumbent users. As a pioneer in bringing radar and sensing capabilities to consumer markets, we understand first-hand the tensions arising as more technologies rely on this finite resource.

Given the reality of congested airwaves, advances in spectrum sharing capabilities are indispensable. However, in the push to enable dynamic coordination, Novelda cautions against overlooking lessons from past attempts at sharing. Sustainable, long-term sharing is only feasible when all parties make efforts to minimize their emissions and withstand interference. Future policies should learn from ultra-wideband (UWB) and focus on reducing interference footprints in time, space, and frequency.

Novelda would specifically like to see UWB highlighted in the National Spectrum Strategy implementation given how perfectly it aligns with the core goals around efficient spectrum utilization and coexistence. By spreading signals of extremely low power density across a huge swath of spectrum, UWB systems can share frequencies without relocating existing users or requiring complex coordination. This simplicity has enabled successful UWB adoption.

As administrators act to meet surging bandwidth demands, Novelda urges to preserve the possibilities unlocked by UWB and other technologies purpose-built for intensive sharing. The most enduring solutions mitigate interference impacts rather than repeatedly moving incumbent systems.

Novelda stand ready to assist in technical research on minimizing spectrum usage footprints and safely validating co-existence. We would be happy to contribute hardware to any testbed efforts developed to support the implementation of the Strategy.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "Dag T. Wisland".

Dag T. Wisland, Prof., Dr.Scient.
CTO

